

DIGITAL MULTIMETER EMM

NEW GENERATION DIGITAL INSTRUMENTS FOR MEASURING ELECTRICAL PARAMETERS. THE RIGHT SOLUTION FOR ANY REQUIRED APPLICATION



- * A valid alternative to the individual traditional panel instruments, in order to save mounting time and space with a better actual reading of measures.
- * More than 40 possible parameters readable in their 4 LED displays.
- * Their low cost and the possibility of displaying two different parameters simultaneously, due to their fourth display (i.e. the phase to phase Voltage and the three currents) make them advisable as a replacement of singular Ammeter or Voltmeter.
- * True rms measures with memory of maximum values.
- * For single phase and three phase applications (even unbalanced) of 3 or 4 wires, for Low and Medium Voltage connections.
- * They are fitted with an ample selection of a transformation relation ratio for the external CT's and VT's, so as with a multi-voltage power supply.
- * Panel and DIN rail mounting versions.
- * Pulse and/or serial communication by RS485 with Modbus protocol.

TECHNICAL CHARACTERISTICS

VOLTAGE	True rms phase, phase to phase and system voltage (average). Measures range: 20÷500V rms phase-phase, 290V rms phase-neutral. Visualisation (0.02÷50.0kV for EMM-4t) Measures accuracy: $\pm 0.5\%$ ± 1 digit
CURRENT	True rms of phase currents and systems value (average), measures range : 0,02÷5A rms Measures accuracy: $\pm 0.5\%$ ± 1 digit Visualisation 0.02÷9999 A
FREQUENCY	Phase L1 frequency Range: 40÷500Hz Accuracy: $\pm 0.5\%$ ± 1 digit
POWER	Active, reactive and apparent power, so as for the system (addition) Measures range: 0,001÷9990Kw, 0,001÷9990kVAr, and 0,001÷9990KVA Accuracy: $\pm 1\%$ ± 1 digit
POWER FACTOR	Per phase and system (average) Power Factor. Measuring range: -0,1÷0,1 Accuracy: $\pm 1\%$ ± 1 digit
TEMPERATURE	Temperature being measured by an internal and compensated sensor Measuring range: 0÷60°C Accuracy: $\pm 2^\circ\text{C}$ Refreshing time of the measure at the starting: 15 minutes.

AUXILIARY SUPPLY / INPUTS

Power Supply	100-125V, 220-240V, 380-415V $\pm 10\%$ Frequency 50-60Hz , (the EMM- $\mu 4$) is self-supplied by measured V Absorption 3VA (other voltages on request)
Voltage inputs	20 ÷ 500V phase-phase; permanent overload +20%. Input impedance: 1M Ω . Wiring on single phase lines, 3 wires three phase lines, 4 wires three phase lines. MV wiring is only possible for EMM-4..t with external P/T Programmable transformation relation from 1 to 400
Current inputs	0,02 ÷ 5 A, permanent overload 20% (100% for the EMM-4t) by means of external CT's secondary 5A, primary programmable from 5 to 10000A. Self-consumption <0,5VA (<0,2 VA for EMM-4t)

